



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,850	09/28/2000	ANDREW D. HOSPODOR	K35A0652	1191

26332 7590 04/07/2004

WESTERN DIGITAL CORP.  
20511 LAKE FOREST DRIVE  
C205 - INTELLECTUAL PROPERTY DEPARTMENT  
LAKE FOREST, CA 92630

EXAMINER

HA, YVONNE QUY M

ART UNIT	PAPER NUMBER
----------	--------------

2664

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/675,850

Applicant(s)

ANDREW D. HOSPODOR ET AL.

Examiner

Yvonne Q. Ha

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 16-29 is/are allowed.
- 6) ☒ Claim(s) 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

*Drawings*

1. The drawings are objected to because figures 2A-4C need detailed description/label on each reference number. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsube et al. (US Patent 6,341,127) in view of Jorgensen (US Patent 6,628,629).

Referring to claim 13, Katsube discloses a switched node for use in a multi-dimensional computer network, the switched node comprising (figures 1 and 2): (a) switching circuitry (figure 2, reference 4003) comprising more than two bi-directional ports for simultaneously transmitting data in multiple dimensions through the computer network (figure 2, references 4001 and 4002), wherein each bi-directional port comprises an input port and an output port (col. 12, lines 31-38, source/destination address, port); (d) a reservation facility for reserving resources within the switch node to support requests to transmit isochronous data (col. 22, lines 65-67, figure 13, reference 107); the switched node receives a request packet to reserve resources to support transmitting isochronous data (col. 9, lines 40-67, col. 10, lines 1-16); if the switched

Art Unit: 2664

node comprises sufficient resources to support transmitting the isochronous data, the reservation facility reserves resources within the switched node to support transmitting the isochronous data, and the switched node transmits an acknowledge (ack) packet to a first neighboring node (col. 11, lines 11-15, i.e. acceptance of node; col. 11, lines 24-49 permit/reject based on policy table of figure 5); if the first neighboring node does not comprise sufficient resources to support transmitting the isochronous data, the switched node receives a negative acknowledge (nack) packet from the first neighboring node, and the switched node transmits the ack packet to a second neighboring node (col. 11, lines 15-24, i.e. rejecting of node; col. 11, lines 24-49 permit/reject based on policy table of figure 5). Katsube failed to teach a data buffer for buffering data; routing circuitry for routing data stored in the data buffer to a selected output port. However, Jorgensen discloses a bidirectional data frame FIFO (figure 10) and QoS/SLA rules engine couple to IP flow buffers (col. 79, lines 39-67). WAN interface management includes WAN ingress/egress queuing control module, WAN interface ports (T1, T3, OC-3 ports) (col. 80, lines 1-11). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Katsube node device controlling label switching path setup in inter-connected networks and Jorgensen reservation based prioritization for wireless IP flows in point to multipoint. Katsube teaches a broadcast storage server carries out reservation of the communication resources, i.e. isochronous channel (col. 24, lines 46-51) and Jorgensen teaches the data frame FIFO and WAN interface management including interface ports. Both teachings present the bandwidth assignment and channel assignment of available resources. A storage or FIFO would be necessary to store these available resources and assign them accordingly, as disclose by Jorgensen. It would be obvious to have a device interface with

Art Unit: 2664

the FIFO/buffer/storage for routing as the next step after retrieve the data out of the FIFO/buffer/storage.

Referring to claims 14 and 15, Katsube discloses all aspects of the claimed invention and further teaches a broadcast storage server carries out reservation of the communication resources, i.e. isochronous channel (col. 24, lines 46-51). Katsube failed to teach a disk for storing data and a head actuated over the disk for writing data to and reading data from the disk. However, Jorgensen discloses a bidirectional data frame FIFO (figure 10) and QoS/SLA rules engine couple to IP flow buffers (col. 79, lines 39-67). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Katsube node device controlling label switching path setup in inter-connected networks and Jorgensen reservation based prioritization for wireless IP flows in point to multipoint. Katsube teaches a broadcast storage server carries out reservation of the communication resources, i.e. isochronous channel (col. 24, lines 46-51) and Jorgensen teaches the data frame FIFO and WAN interface management including interface ports. The disk as defined by Newton's dictionary is a magnetic storage which records information magnetically; the disk drive is for storing writing and reading data on a disk. It is conventional to have the disk in the storage to store temporary information being sent or received (i.e. read/write information into the disk space).

***Allowable Subject Matter***

4. Claims 1-12, 16-29 allowed.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2664

- Eriksson et al. (US Patent 6,661,806) discloses resource reservation
- Markwalter et al. (US Patent 6,577,630) discloses self-configuring source-aware bridging for noisy media

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ajit Patel can be reached on 703-308-5347. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH

  
**Ajit Patel**  
**Primary Examiner**